

Owens 09/149,721

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(FILE 'REGISTRY' ENTERED AT 10:12:54 ON 10 SEP 2001)

DEL HIS Y
ACT OWENS/A

L1 STR
L2 763 SEA FILE=REGISTRY SSS FUL L1

ACT OWENS149/A

L3 STR
L4 149 SEA FILE=REGISTRY SSS FUL L3

*broad structure
search*

FILE 'HCAPLUS' ENTERED AT 10:13:40 ON 10 SEP 2001

L5 401 S L4
L6 611745 S NUCLEOTIDE# OR DNA OR RNA OR POLYNUCLEOTIDE# OR PLASMID# OR
O
L7 639687 S L6 OR NUCLEIC ACID#
L8 4 S L7 AND L5

=> fil reg

FILE 'REGISTRY' ENTERED AT 10:17:42 ON 10 SEP 2001
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STRUCTURE FILE UPDATES: 7 SEP 2001 HIGHEST RN 355367-45-2
 DICTIONARY FILE UPDATES: 7 SEP 2001 HIGHEST RN 355367-45-2

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

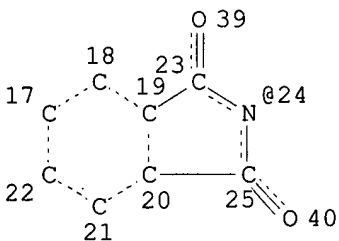
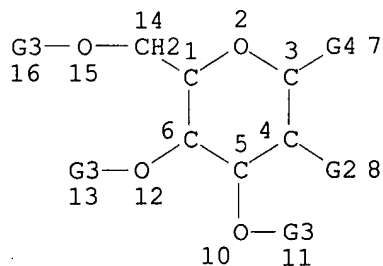
Please note that search-term pricing does apply when
 conducting SmartSELECT searches.

Structure search limits have been increased. See HELP SLIMIT
 for details.

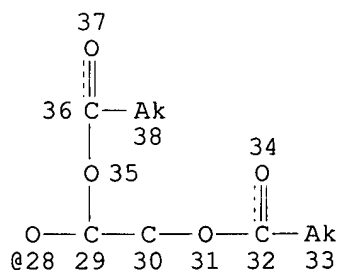
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L3

STR



O—Ak
 @26 27



VAR G2=NH2/24
 VAR G3=H/C(O)CH3
 VAR G4=BR/26/28
 NODE ATTRIBUTES:
 CONNECT IS E1 RC AT 27
 CONNECT IS E1 RC AT 33
 CONNECT IS E1 RC AT 38
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED

Owens 09/149,721

NUMBER OF NODES IS 39

STEREO ATTRIBUTES: NONE

L4 149 SEA FILE=REGISTRY SSS FUL L3

100.0% PROCESSED 50974 ITERATIONS
SEARCH TIME: 00.00.15

149 ANSWERS

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 10:17:52 ON 10 SEP 2001
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FILE COVERS 1947 - 10 Sep 2001 VOL 135 ISS 12
FILE LAST UPDATED: 7 Sep 2001 (20010907/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

HCAplus now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=

=> d his 15-

FILE 'HCAPLUS' ENTERED AT 10:13:40 ON 10 SEP 2001

L5 401 S L4

L6 611745 S NUCLEOTIDE# OR DNA OR RNA OR POLYNUCLEOTIDE# OR PLASMID# OR

O

L7 639687 S L6 OR NUCLEIC ACID#

L8 4 S L7 AND L5

=> d .ca hitstr 1-4

L8 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2001:186432 HCAPLUS

DOCUMENT NUMBER: 134:340652

TITLE: A new strategy for the solid-phase synthesis of glycoconjugate biomolecules

AUTHOR(S): Di Fabio, Giovanni; De Capua, Antonia; De Napoli, Lorenzo; Montesarchio, Daniela; Piccialli, Gennaro; Rossi, Filomena; Benedetti, Ettore

CORPORATE SOURCE: Dipartimento di Chimica Organica e Biochimica, Universita degli Studi di Napoli "Federico II", Naples, 80126, Italy

SOURCE: Synlett (2001), (3), 341-344
CODEN: SYNLES; ISSN: 0936-5214

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A simple and efficient bi-directional solid-phase synthesis, based on the use of a Tentagel solid support, functionalized with a suitably protected 2-amino sugar residue, is proposed for the prepn. of a variety of glycoconjugates, including glycopeptides and nucleoglycopeptides.

CC 33-9 (Carbohydrates)
Section cross-reference(s): 34

ST **nucleotide** glycoconjugate glycopeptide Tentagel solid phase synthesis

IT Solid phase synthesis
(solid-phase synthesis of **nucleotide** glycopeptides)

IT Glycoconjugates
Glycopeptides
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of **nucleotide** glycopeptides)

IT 108-30-5, Succinic anhydride, reactions **13374-29-3** 35661-60-0
98796-53-3 102212-98-6 313988-69-1
RL: RCT (Reactant)

(solid-phase synthesis of **nucleotide** glycopeptides)
IT 338801-55-1P 338801-56-2DP, Tentagel resin polymer support
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of **nucleotide** glycopeptides)

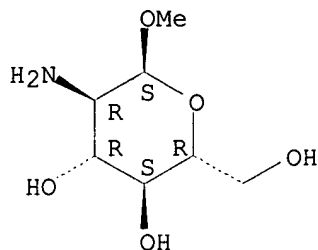
IT 338801-57-3P 338801-58-4P 338801-59-5P 338801-60-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of **nucleotide** glycopeptides)

IT **13374-29-3**
RL: RCT (Reactant)
(solid-phase synthesis of **nucleotide** glycopeptides)

RN 13374-29-3 HCAPLUS

CN .alpha.-D-Glucopyranoside, methyl 2-amino-2-deoxy-, hydrochloride (7CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

REFERENCE COUNT: 23
 REFERENCE(S): (1) Adinolfi, M; Tetrahedron Lett 1996, V37, P5007 HCAPLUS
 (2) Adinolfi, M; Tetrahedron Lett 1998, V39, P1953 HCAPLUS
 (3) Adinolfi, M; Tetrahedron Lett 1999, V40, P2607 HCAPLUS
 (4) Akhtar, S; Tetrahedron Lett 1995, V36, P7333 HCAPLUS
 (7) de Kort, M; Eur J Org Chem 1999, P2337 HCAPLUS
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1999:194158 HCAPLUS
 DOCUMENT NUMBER: 130:242316
 TITLE: Hydrophobic glycosylamine derivatives, compositions, and methods for their use
 INVENTOR(S): Mumper, Russell J.; Tagliaferri, Frank
 PATENT ASSIGNEE(S): Genemedicine, Inc., USA
 SOURCE: PCT Int. Appl., 88 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9912945	A2	19990318	WO 1998-US18888	19980908
WO 9912945	A3	19990819		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9893839	A1	19990329	AU 1998-93839	19980908
EP 1015465	A2	20000705	EP 1998-946932	19980908
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, FI
 PRIORITY APPLN. INFO.: US 1997-58259 P 19970908
 WO 1998-US18888 W 19980908
 OTHER SOURCE(S): MARPAT 130:242316
 AB The invention relates in part to hydrophobic glycosylamine derivs., methods for synthesizing hydrophobic derivs., compns. comprising these derivs., and methods for delivering macromols., such as proteins, peptides, lipids, carbohydrates, peptidomimetics, org. mols., and nucleic acids, to cells by administering these compns. The compds., compns., and methods of the invention are particularly useful for gene therapy and cancer treatment. Compns. contg. 1-mono-oleyl-.beta.-D-glucosamine or 1-monopalmityl-.beta.-D-glucosamine, plasmid DNA comprising an IL-2 gene, and DOPE reduced the growth rate in mice by 30% after 9 days and by 25% after 13 days, resp.
 IC ICM C07H015-00
 CC 63-6 (Pharmaceuticals)
 Section cross-reference(s): 33
 IT **Nucleotides**, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (analogs; compns. and synthesis of hydrophobic glycosylamine derivs. for delivery of macromol. compds. to cells)
 IT Antitumor agents
 Drug delivery systems
 Gene therapy
 Infusions (drug delivery systems)
 Inhalants (drug delivery systems)
 Injections (drug delivery systems)
 Intravenous injections
 Liposomes (drug delivery systems)
 Oral drug delivery systems
Plasmids
 Reducing agents
 (compns. and synthesis of hydrophobic glycosylamine derivs. for delivery of macromol. compds. to cells)
 IT **DNA**
Nucleic acids
Polynucleotides
RNA
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (compns. and synthesis of hydrophobic glycosylamine derivs. for delivery of macromol. compds. to cells)
 IT **221247-53-6P 221247-55-8P**
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (compns. and synthesis of hydrophobic glycosylamine derivs. for delivery of macromol. compds. to cells)
 IT 143-28-2, Oleyl alcohol 36653-82-4, Hexadecanol 63000-69-1
138395-62-7
 RL: RCT (Reactant)
 (compns. and synthesis of hydrophobic glycosylamine derivs. for delivery of macromol. compds. to cells)
 IT **221247-52-5P 221247-54-7P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (compns. and synthesis of hydrophobic glycosylamine derivs. for delivery of macromol. compds. to cells)
 IT **221247-53-6P 221247-55-8P**
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);

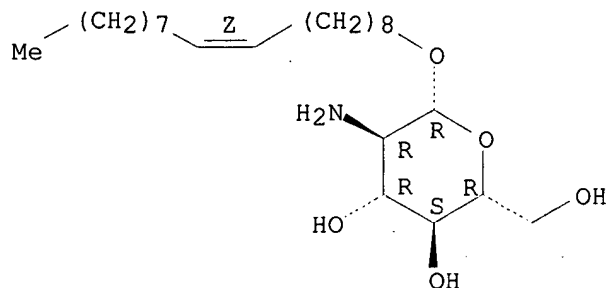
Owens 09/149,721

BIOL (Biological study); PREP (Preparation); USES (Uses)
(compns. and synthesis of hydrophobic glycosylamine derivs. for
delivery of macromol. compds. to cells)

RN 221247-53-6 HCAPLUS

CN .beta.-D-Glucopyranoside, (9Z)-9-octadecenyl 2-amino-2-deoxy- (9CI) (CA
INDEX NAME)

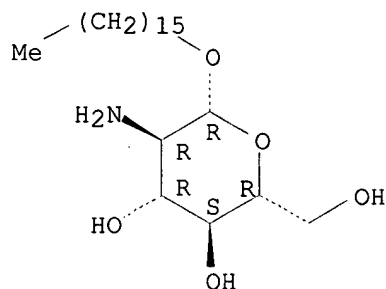
Absolute stereochemistry.
Double bond geometry as shown.



RN 221247-55-8 HCAPLUS

CN .beta.-D-Glucopyranoside, hexadecyl 2-amino-2-deoxy- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.



IT 63000-69-1 138395-62-7

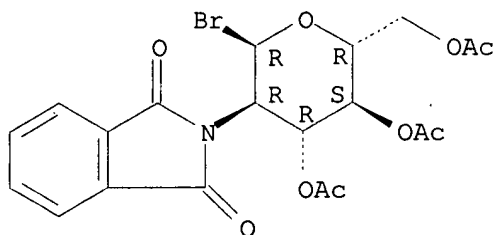
RL: RCT (Reactant)

(compns. and synthesis of hydrophobic glycosylamine derivs. for
delivery of macromol. compds. to cells)

RN 63000-69-1 HCAPLUS

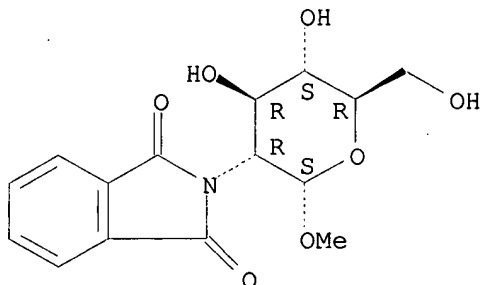
CN .alpha.-D-Glucopyranosyl bromide, 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-
isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



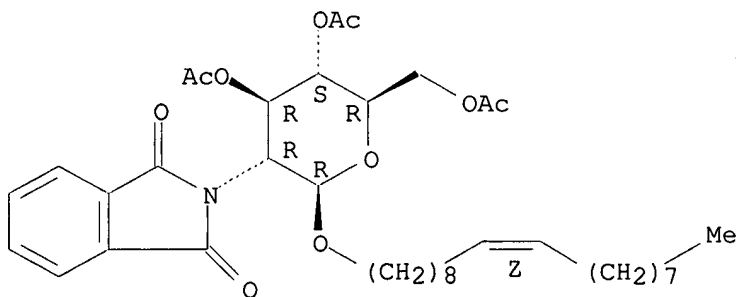
RN 138395-62-7 HCAPLUS
 CN .alpha.-D-Glucopyranoside, methyl 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



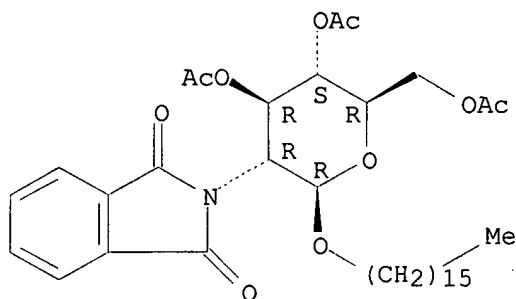
IT 221247-52-5P 221247-54-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (comps. and synthesis of hydrophobic glycosylamine derivs. for
 delivery of macromol. compds. to cells)
 RN 221247-52-5 HCAPLUS
 CN .beta.-D-Glucopyranoside, (9Z)-9-octadecenyl 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 221247-54-7 HCAPLUS
 CN .beta.-D-Glucopyranoside, hexadecyl 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:441303 HCAPLUS

DOCUMENT NUMBER: 122:205195

TITLE: Bivalent sialyl Lewis X (SLeX) saccharides to inhibit selectin-mediated cell adhesion

INVENTOR(S): Gaeta, Federico C. A.; DeFrees, Shawn A.

PATENT ASSIGNEE(S): Cytel Corp., USA

SOURCE: PCT Int. Appl., 105 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9503059	A1	19950202	WO 1994-US8384	19940721
W: AU, BG, CA, CN, CZ, FI, HU, JP, KR, MN, NO, NZ, PL, RO, RU, SK, UA, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5559103	A	19960924	US 1994-278020	19940720
AU 9474046	A1	19950220	AU 1994-74046	19940721
JP 09500683	T2	19970121	JP 1994-505381	19940721
PRIORITY APPLN. INFO.:			US 1993-95657	19930721
			US 1994-278020	19940720
			WO 1994-US8384	19940721

OTHER SOURCE(S): MARPAT 122:205195

AB Bivalent SLeX saccharide derivs. are provided that inhibit binding of cells expressing a surface selectin receptor (e.g. blood platelets and vascular endothelial cells) to cells which express SLeX on their surfaces (e.g. leukocytes). Pharmaceutical compns. comprising these saccharides, processes for making and using them, and methods for synthesis of the saccharides are also disclosed.

IC ICM A61K031-715

CC 1-8 (Pharmacology)

Section cross-reference(s): 33, 63

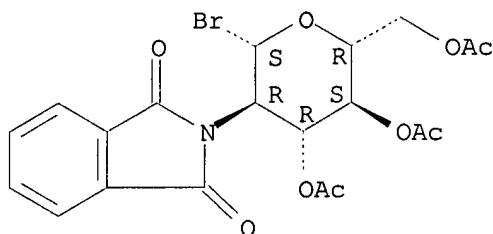
IT **Plasmid** and Episome

(pCDNAI-sol-E-selectin; bivalent sialyl Lewis X (SLeX) saccharides to inhibit selectin-mediated cell adhesion)

IT 98-88-4, Benzoyl chloride 3019-71-4, Trichloroacetyl isocyanate

10028-45-2 28053-08-9 28605-65-4 101833-22-1 148296-47-3
 RL: RCT (Reactant)
 (bivalent sialyl Lewis X (S_{Lex}) saccharides to inhibit
 selectin-mediated cell adhesion)
 IT 10028-45-2
 RL: RCT (Reactant)
 (bivalent sialyl Lewis X (S_{Lex}) saccharides to inhibit
 selectin-mediated cell adhesion)
 RN 10028-45-2 HCAPLUS
 CN .beta.-D-Glucopyranosyl bromide, 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-
 isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L8 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1994:548341 HCAPLUS

DOCUMENT NUMBER: 121:148341

TITLE: Structure-activity relationships in the induction of
 single-strand breakage in **plasmid** pBR322
 DNA by amino sugars and derivatives

AUTHOR(S): Kashige, Nobuhiro; Yamaguchi, Tadatoshi; Ohtakara,
 Akira; Mitsutomi, Masaru; Brimacombe, John S.; Miake,
 Fumio; Watanabe, Kenji

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Fukuoka
 University, Nanakuma, Jonan-ku, Fukuoka, 814-01,
 Japan

SOURCE: Carbohydr. Res. (1994), 257(2), 285-91
 CODEN: CRBRAT; ISSN: 0008-6215

DOCUMENT TYPE: Journal

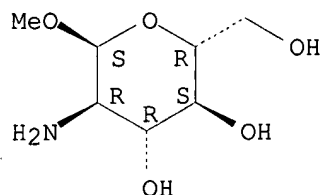
LANGUAGE: English

AB Structure-activity relationships in the induction of strand breakage in
 plasmid pBR322 DNA by amino sugars and their derivs. were investigated
 using agarose gel electrophoresis. The coexistence of a potential free
 aldehyde group at the C-1 position and a free amino group at the C-2
 position in the mols. was indispensable for the display of DNA
 strand-breaking activity in both mono- and oligo-aminosaccharides. The
 activity was increased by the introduction of an acidic group, esp. a
 phosphate group, at the C-6 position. The activity was also increased by
 the addn. of Cu²⁺. The order of activity of the amino monosaccharides
 tested was D-isoglucosamine > D-mannosamine > D-galactosamine >
 D-glucosamine, and it is suggested that this order is correlated with the
 portion of acyclic (aldehydo) form in the soln. of each sugar. The
 possible chem. basis for DNA strand breakage by amino sugars is
 discussed.

CC 1-3 (Pharmacology)
 Section cross-reference(s): 4

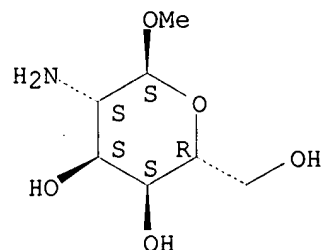
ST amino sugar **DNA** strand breakage structure
 IT Molecular structure-biological activity relationship
 (DNA-cleaving, of amino sugars and derivs.)
 IT 50-99-7, D-Glucose, biological studies 154-17-6, 2-Deoxy-D-glucose
 298-08-8, .alpha.-Aminoacetone 499-14-9, Chondrosine 576-44-3,
 D-Kanosamine 577-76-4, Chitobiose 1811-31-0, N-Acetyl-D-galactosamine
 3416-24-8, D-Glucosamine 3615-17-6, N-Acetyl-D-mannosamine 3616-42-0,
 D-Glucosamine 6-phosphate 3646-68-2, D-Glucosaminic acid 4429-04-3,
 D-Isoglucosamine 4607-22-1 **4704-14-7**, Methyl
 2-amino-2-deoxy-.alpha.-D-glucopyranoside 5155-47-5, Methyl
 6-amino-6-deoxy-.alpha.-D-glucopyranoside 5567-52-2, Chitotetraose
 7512-17-6, N-Acetyl-D-glucosamine 7535-00-4, D-Galactosamine
 14307-02-9, D-Mannosamine 14635-95-1 19889-76-0 32385-07-2
 35812-81-8 40879-84-3 41708-93-4, Chitotriose 41708-94-5,
 Chitopentaose 41708-95-6, Chitohexaose 50692-69-8, Benzyl
 2-amino-2-deoxy-.alpha.-D-glucopyranoside 53574-53-1 **63122-16-7**
 66954-08-3 76330-20-6 91674-26-9 138430-53-2 156304-79-9
 156304-80-2 156304-81-3
 RL: BIOL (Biological study)
 (DNA single-strand breakage by, structure in relation to)
 IT **4704-14-7**, Methyl 2-amino-2-deoxy-.alpha.-D-glucopyranoside
63122-16-7
 RL: BIOL (Biological study)
 (DNA single-strand breakage by, structure in relation to)
 RN 4704-14-7 HCAPLUS
 CN .alpha.-D-Glucopyranoside, methyl 2-amino-2-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 63122-16-7 HCAPLUS
 CN .alpha.-D-Altropyranoside, methyl 2-amino-2-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



Owens 09/149,721

=> d his

(FILE 'HCAPLUS' ENTERED AT 10:01:46 ON 10 SEP 2001)
DEL HIS Y

FILE 'REGISTRY' ENTERED AT 10:03:17 ON 10 SEP 2001
ACT OWENS2/A

L1 STR
L2 (149)SEA FILE=REGISTRY SSS FUL L1
L3 STR
L4 24 SEA FILE=REGISTRY SUB=L2 SSS FUL L3

L5 501021 S NC4-C6/ES
L6 14 S L5 AND L4
L7 5 S L4 AND C>23
L8 18 S L4 AND BR/ELS
L9 12 S L8 AND L6

narrowed structural search

FILE 'HCAPLUS' ENTERED AT 10:08:32 ON 10 SEP 2001
L10 6 S L7
L11 194 S L9
L12 1 S L10 AND L11
L13 5 S L10 NOT L12

Owens 09/149,721

=> fil reg

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STRUCTURE FILE UPDATES: 7 SEP 2001 HIGHEST RN 355367-45-2
DICTIONARY FILE UPDATES: 7 SEP 2001 HIGHEST RN 355367-45-2

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

Please note that search-term pricing does apply when
conducting SmartSELECT searches.



Structure search limits have been increased. See HELP SLIMIT
for details.

=> d his 11-19

(FILE 'HCAPLUS' ENTERED AT 10:01:46 ON 10 SEP 2001)
DEL HIS Y

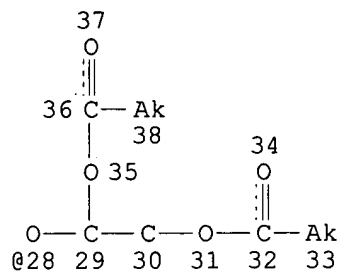
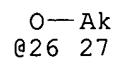
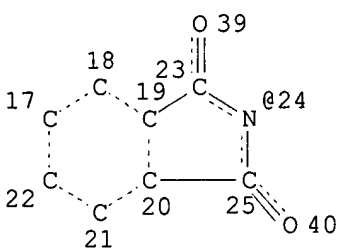
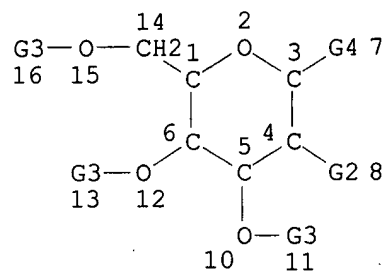
FILE 'REGISTRY' ENTERED AT 10:03:17 ON 10 SEP 2001
ACT OWENS2/A

L1 STR
L2 (149) SEA FILE=REGISTRY SSS FUL L1
L3 STR
L4 24 SEA FILE=REGISTRY SUB=L2 SSS FUL L3

L5 501021 S NC4-C6/ES → all  Ring system's
L6 14 S L5 AND L4 → struc. with long carbon chains
L7 5 S L4 AND C>23 → Structure with Bromine
L8 18 S L4 AND BR/ELS
L9 12 S L8 AND L6 → Structures with Br and 

=> d que stat 14

L1 STR



VAR G2=NH2/24

VAR G3=H/C(O)CH3

VAR G4=BR/26/28

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 27

CONNECT IS E1 RC AT 33

CONNECT IS E1 RC AT 38

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

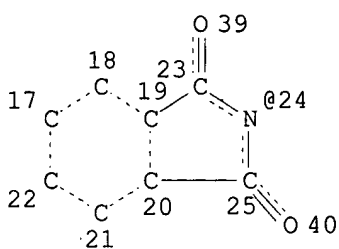
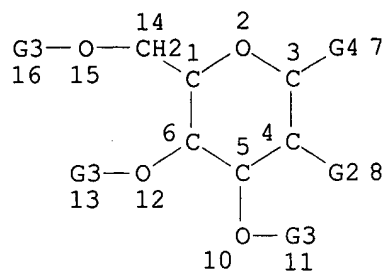
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STEREO ATTRIBUTES: NONE

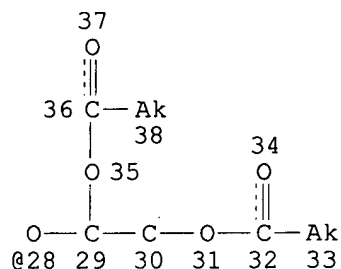
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L3 STR

Owens 09/149,721



O-Ak
@26 27



VAR G2=NH2/24
VAR G3=H/C(O)CH3
VAR G4=BR/26/28
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 27
CONNECT IS E1 RC AT 33
CONNECT IS E1 RC AT 38
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M16-X18 C AT 27
ECOUNT IS M16-X18 C AT 33
ECOUNT IS M16-X18 C AT 38

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 39

STEREO ATTRIBUTES: NONE
L4 24 SEA FILE=REGISTRY SUB=L2 SSS FUL L3

100.0% PROCESSED 149 ITERATIONS
SEARCH TIME: 00.00.02

24 ANSWERS

=> d his 14-19

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L6 14 S L5 AND L4

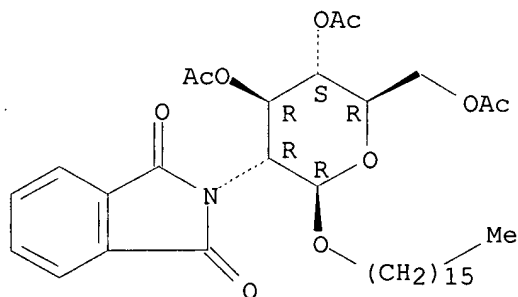
Owens 09/149,721

L7 5 S L4 AND C>23
L8 18 S L4 AND BR/ELS
L9 12 S L8 AND L6

=> d ide can 17 1-5;d ide can 19 1-12

L7 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2001 ACS
RN 221247-54-7 REGISTRY
CN .beta.-D-Glucopyranoside, hexadecyl 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C36 H53 N O10
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.

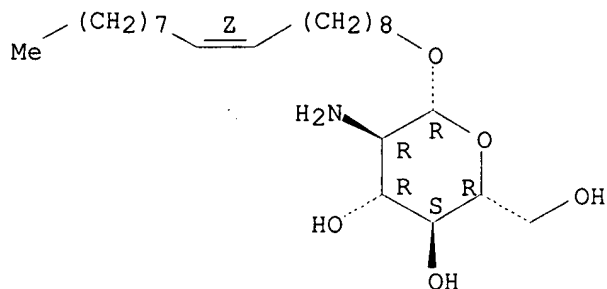


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:242316

L7 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2001 ACS
RN 221247-53-6 REGISTRY
CN .beta.-D-Glucopyranoside, (9Z)-9-octadecenyl 2-amino-2-deoxy- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H47 N O5
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.
Double bond geometry as shown.

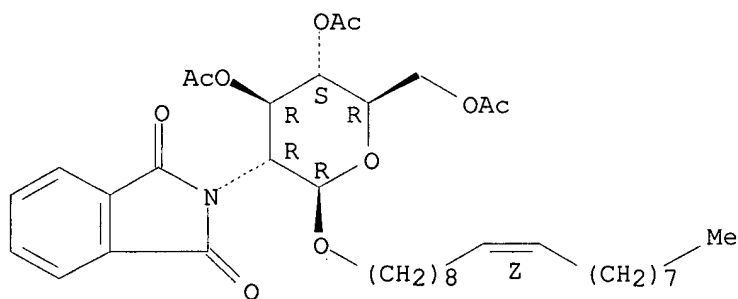


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:242316

L7 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2001 ACS
RN 221247-52-5 REGISTRY
CN .beta.-D-Glucopyranoside, (9Z)-9-octadecenyl 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C38 H55 N O10
SR CA
LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.
Double bond geometry as shown.

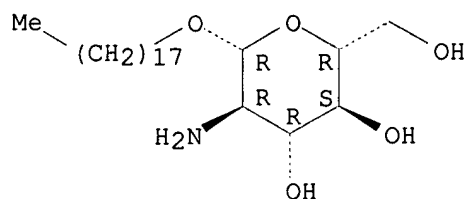


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 130:242316

L7 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2001 ACS
RN 159405-31-9 REGISTRY
CN .beta.-D-Glucopyranoside, octadecyl 2-amino-2-deoxy- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C24 H49 N O5
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



4 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:333590

REFERENCE 2: 128:305665

REFERENCE 3: 124:176728

REFERENCE 4: 121:312595

L7 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2001 ACS

RN 134227-32-0 REGISTRY

CN D-Glucopyranoside, octadecyl 2-amino-2-deoxy-, hydrochloride (9CI) (CA INDEX NAME)

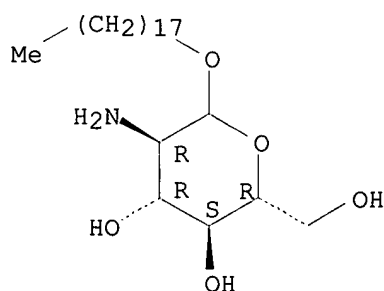
FS STEREOSEARCH

MF C24 H49 N O5 . Cl H

SR CA

LC STN Files: CA, CAPLUS, TOXLIT

Absolute stereochemistry.



● HCl

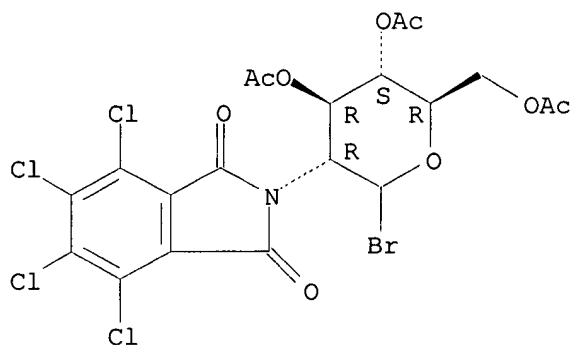
1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:15307

Owens 09/149,721

L9 ANSWER 1 OF 12 REGISTRY COPYRIGHT 2001 ACS
RN 189218-64-2 REGISTRY
CN D-Glucopyranosyl bromide, 2-deoxy-2-(4,5,6,7-tetrachloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H16 Br Cl4 N O9
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.

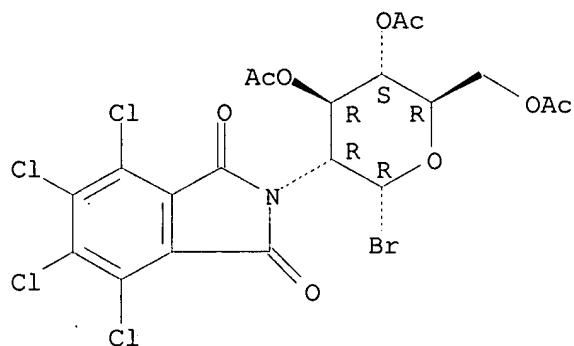


3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:5080
REFERENCE 2: 129:331058
REFERENCE 3: 126:305712

L9 ANSWER 2 OF 12 REGISTRY COPYRIGHT 2001 ACS
RN 180778-39-6 REGISTRY
CN .alpha.-D-Glucopyranosyl bromide, 2-deoxy-2-(4,5,6,7-tetrachloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H16 Br Cl4 N O9
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.

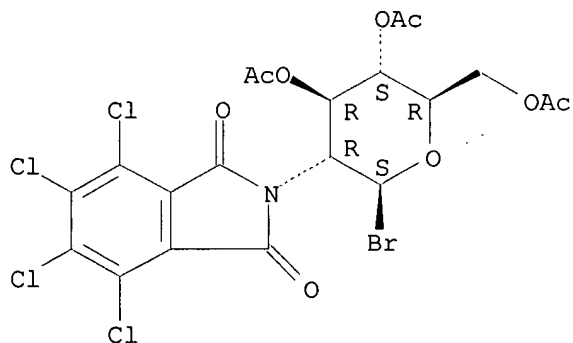


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 125:196181

L9 ANSWER 3 OF 12 REGISTRY COPYRIGHT 2001 ACS
RN 180778-38-5 REGISTRY
CN .beta.-D-Glucopyranosyl bromide, 2-deoxy-2-(4,5,6,7-tetrachloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H16 Br Cl4 N O9
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

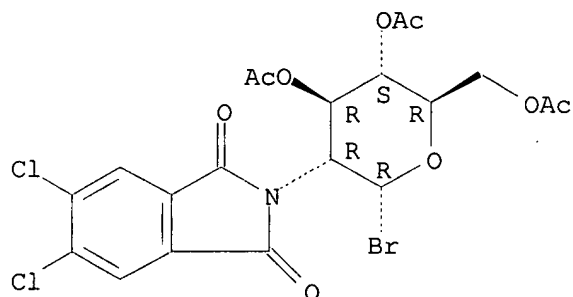
REFERENCE 1: 125:196181

L9 ANSWER 4 OF 12 REGISTRY COPYRIGHT 2001 ACS
RN 175229-72-8 REGISTRY
CN .alpha.-D-Glucopyranosyl bromide, 2-deoxy-2-(5,6-dichloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH

Owens 09/149,721

MF C20 H18 Br Cl2 N O9
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

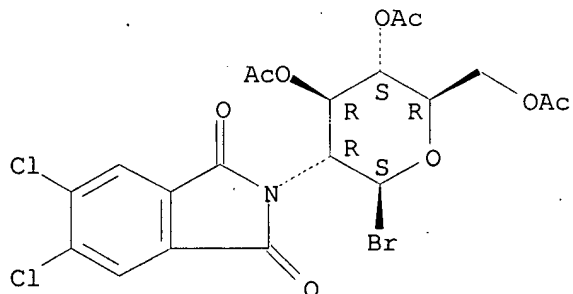


1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 124:261532

L9 ANSWER 5 OF 12 REGISTRY COPYRIGHT 2001 ACS
RN 175229-71-7 REGISTRY
CN .beta.-D-Glucopyranosyl bromide, 2-deoxy-2-(5,6-dichloro-1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H18 Br Cl2 N O9
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry. Rotation (+).



1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

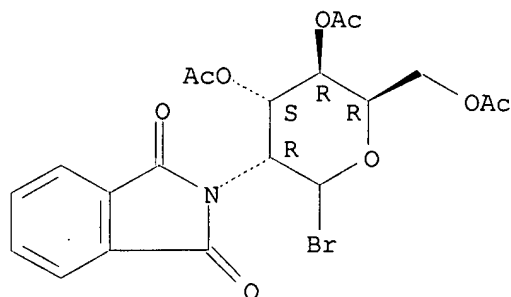
REFERENCE 1: 124:261532

L9 ANSWER 6 OF 12 REGISTRY COPYRIGHT 2001 ACS
RN 171234-13-2 REGISTRY
CN D-Gulopyranosyl bromide, 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Owens 09/149,721

FS STEREOSEARCH
MF C20 H20 Br N O9
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



3 REFERENCES IN FILE CA (1967 TO DATE)
3 REFERENCES IN FILE CAPLUS (1967 TO DATE)

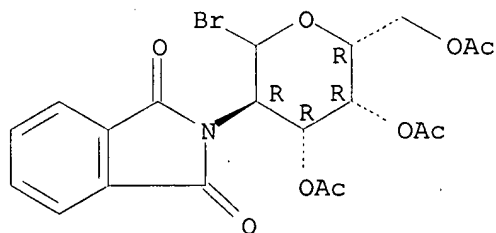
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REFERENCE 2: 124:56497

REFERENCE 3: 124:9205

L9 ANSWER 7 OF 12 REGISTRY COPYRIGHT 2001 ACS
RN 110455-06-6 REGISTRY
CN D-Galactopyranosyl bromide,
2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H20 Br N O9
SR CA
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMINFORMRX, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



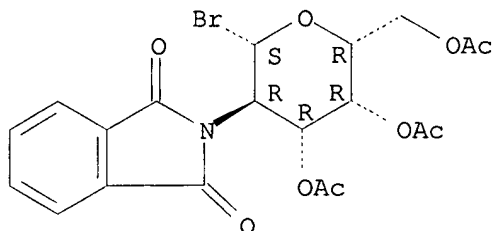
8 REFERENCES IN FILE CA (1967 TO DATE)
8 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 122:133606

REFERENCE 2: 114:185935
 REFERENCE 3: 113:59707
 REFERENCE 4: 113:41172
 REFERENCE 5: 111:23841
 REFERENCE 6: 110:75984
 REFERENCE 7: 109:223663
 REFERENCE 8: 107:154687

L9 ANSWER 8 OF 12 REGISTRY COPYRIGHT 2001 ACS
 RN 90458-06-3 REGISTRY
 CN .beta.-D-Galactopyranosyl bromide, 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
 FS STEREOSEARCH
 MF C20 H20 Br N O9
 LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMINFORMRX, USPATFULL
 (*File contains numerically searchable property data)

Absolute stereochemistry.



13 REFERENCES IN FILE CA (1967 TO DATE)
 13 REFERENCES IN FILE CAPLUS (1967 TO DATE)

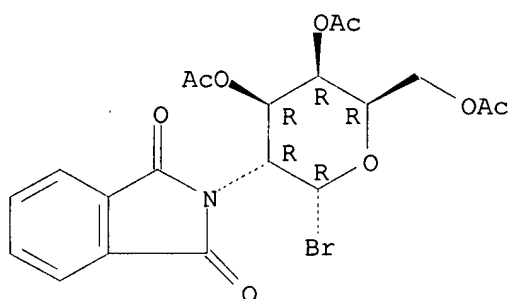
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 REFERENCE 2: 123:33556
 REFERENCE 3: 115:9257
 REFERENCE 4: 113:172491
 REFERENCE 5: 109:129528
 REFERENCE 6: 108:6300
 REFERENCE 7: 107:176347
 REFERENCE 8: 107:134594
 REFERENCE 9: 106:120180

Owens 09/149,721

REFERENCE 10: 106:117683

L9 ANSWER 9 OF 12 REGISTRY COPYRIGHT 2001 ACS
RN 81704-03-2 REGISTRY
CN .alpha.-D-Galactopyranosyl bromide, 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H20 Br N O9
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMINFORMRX, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



20 REFERENCES IN FILE CA (1967 TO DATE)
20 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:272136
REFERENCE 2: 131:157896
REFERENCE 3: 130:139551
REFERENCE 4: 127:5280
REFERENCE 5: 126:157708
REFERENCE 6: 121:158031
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REFERENCE 9: 119:265156
REFERENCE 10: 117:111984

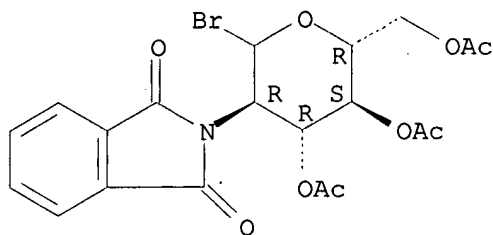
L9 ANSWER 10 OF 12 REGISTRY COPYRIGHT 2001 ACS
RN 70831-94-6 REGISTRY
CN D-Glucopyranosyl bromide, 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H20 Br N O9
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMINFORMRX, TOXLIT,

Owens 09/149,721

USPATFULL

(*File contains numerically searchable property data)

Absolute stereochemistry.



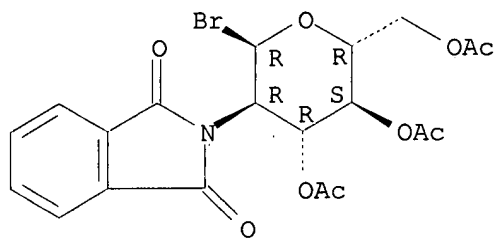
42 REFERENCES IN FILE CA (1967 TO DATE)

42 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:74212
REFERENCE 2: 131:45016
REFERENCE 3: 131:19212
REFERENCE 4: 129:316471
REFERENCE 5: 127:319184
REFERENCE 6: 126:168260
REFERENCE 7: 126:157708
REFERENCE 8: 125:329206
REFERENCE 9: 125:185857
REFERENCE 10: 123:199268

L9 ANSWER 11 OF 12 REGISTRY COPYRIGHT 2001 ACS
RN 63000-69-1 REGISTRY
CN .alpha.-D-Glucopyranosyl bromide, 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-
isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C20 H20 Br N O9
LC STN Files: BEILSTEIN*, CA, CAPLUS, CASREACT, CHEMINFORMRX, TOXLIT,
USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.

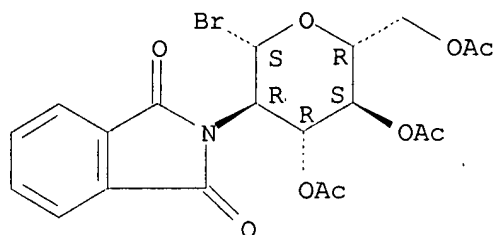


24 REFERENCES IN FILE CA (1967 TO DATE)
24 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 133:362913
REFERENCE 2: 130:242316
REFERENCE 3: 129:343650
REFERENCE 4: 126:47484
REFERENCE 5: 126:8452
REFERENCE 6: 125:301540
REFERENCE 7: 125:196166
REFERENCE 8: 125:87030
REFERENCE 9: 123:33556
REFERENCE 10: 122:106316

L9 ANSWER 12 OF 12 REGISTRY COPYRIGHT 2001 ACS
RN 10028-45-2 REGISTRY
CN .beta.-D-Glucopyranosyl bromide, 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glucopyranosyl bromide, 2-deoxy-2-phthalimido-, 3,4,6-triacetate, .beta.-D- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 2-Deoxy-2-phthalimido-3,4,6-tri-O-acetyl-.beta.-D-glucopyranosyl bromide
FS STEREOSEARCH
MF C20 H20 Br N O9
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, TOXLIT, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.



103 REFERENCES IN FILE CA (1967 TO DATE)
103 REFERENCES IN FILE CAPLUS (1967 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 134:42343
REFERENCE 2: 132:222783
REFERENCE 3: 131:72771
REFERENCE 4: 129:343648
REFERENCE 5: 129:290338
REFERENCE 6: 128:48415
REFERENCE 7: 126:238722
REFERENCE 8: 126:47484
REFERENCE 9: 125:329281
REFERENCE 10: 125:329158

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 10:11:01 ON 10 SEP 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1947 - 10 Sep 2001 VOL 135 ISS 12
FILE LAST UPDATED: 7 Sep 2001 (20010907/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for

more information.

HCAplus now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

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L10- RANGE NOT VALID

=> d his l10-

(FILE 'HCAPLUS' ENTERED AT 10:08:32 ON 10 SEP 2001)

L10 6 S L7
L11 194 S L9
L12 1 S L10 AND L11
L13 5 S L10 NOT L12

FILE 'REGISTRY' ENTERED AT 10:09:54 ON 10 SEP 2001

FILE 'HCAPLUS' ENTERED AT 10:11:01 ON 10 SEP 2001

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L12 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:194158 HCAPLUS
DOCUMENT NUMBER: 130:242316
TITLE: Hydrophobic glycosylamine derivatives, compositions, and methods for their use
INVENTOR(S): Mumper, Russell J.; Tagliaferri, Frank
PATENT ASSIGNEE(S): Genemedicine, Inc., USA
SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9912945	A2	19990318	WO 1998-US18888	19980908
WO 9912945	A3	19990819		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9893839	A1	19990329	AU 1998-93839	19980908
EP 1015465	A2	20000705	EP 1998-946932	19980908

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

PRIORITY APPLN. INFO.:

US 1997-58259 P 19970908

WO 1998-US18888 W 19980908

OTHER SOURCE(S): MARPAT 130:242316

AB The invention relates in part to hydrophobic glycosylamine derivs., methods for synthesizing hydrophobic derivs., compns. comprising these derivs., and methods for delivering macromols., such as proteins, peptides, lipids, carbohydrates, peptidomimetics, org. mols., and nucleic acids, to cells by administering these compns. The compds., compns., and methods of the invention are particularly useful for gene therapy and cancer treatment. Compns. contg. 1-mono-oleyl-.beta.-D-glucosamine or 1-monopalmityl-.beta.-D-glucosamine, plasmid DNA comprising an IL-2 gene, and DOPE reduced the growth rate in mice by 30% after 9 days and by 25% after 13 days, resp.

IC ICM C07H015-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 33

IT 221247-53-6P 221247-55-8P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)

(compns. and synthesis of hydrophobic glycosylamine derivs. for delivery of macromol. compds. to cells)

IT 143-28-2, Oleyl alcohol 36653-82-4, Hexadecanol 63000-69-1
138395-62-7

RL: RCT (Reactant)

(compns. and synthesis of hydrophobic glycosylamine derivs. for delivery of macromol. compds. to cells)

IT 221247-52-5P 221247-54-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(compns. and synthesis of hydrophobic glycosylamine derivs. for delivery of macromol. compds. to cells)

IT 221247-53-6P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)

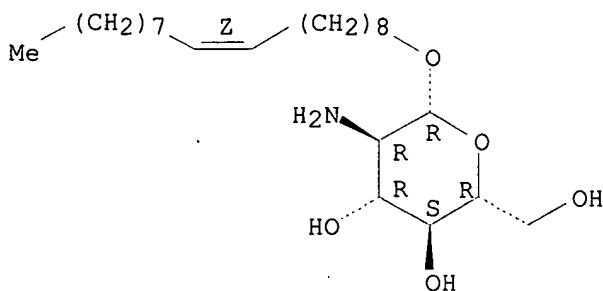
(compns. and synthesis of hydrophobic glycosylamine derivs. for delivery of macromol. compds. to cells)

RN 221247-53-6 HCAPLUS

CN .beta.-D-Glucopyranoside, (9Z)-9-octadecenyl 2-amino-2-deoxy- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

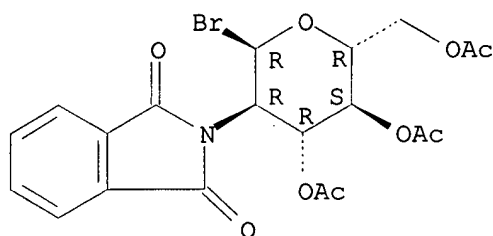
Double bond geometry as shown.



IT 63000-69-1

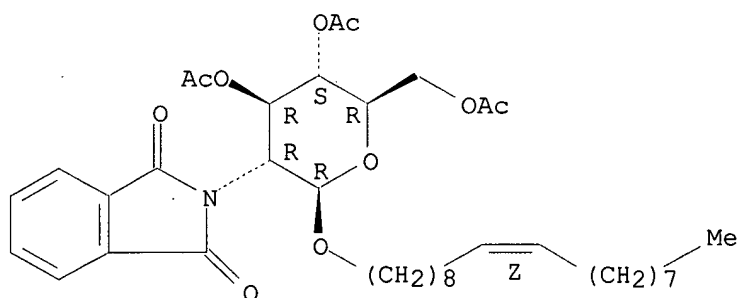
RL: RCT (Reactant)
 (compns. and synthesis of hydrophobic glycosylamine derivs. for
 delivery of macromol. compds. to cells)
 RN 63000-69-1 HCAPLUS
 CN .alpha.-D-Glucopyranosyl bromide, 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-
 isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



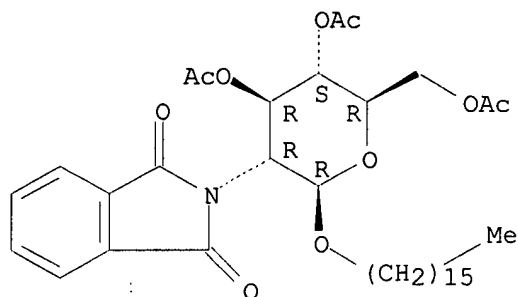
IT 221247-52-5P 221247-54-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (compns. and synthesis of hydrophobic glycosylamine derivs. for
 delivery of macromol. compds. to cells)
 RN 221247-52-5 HCAPLUS
 CN .beta.-D-Glucopyranoside, (9Z)-9-octadecenyl 2-deoxy-2-(1,3-dihydro-1,3-
 dioxo-2H-isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.



RN 221247-54-7 HCAPLUS
 CN .beta.-D-Glucopyranoside, hexadecyl 2-deoxy-2-(1,3-dihydro-1,3-dioxo-2H-
 isoindol-2-yl)-, 3,4,6-triacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L13 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:590619 HCAPLUS

DOCUMENT NUMBER: 131:333590

TITLE: The folding and enzymatic activity of glucose oxidase in the glycolipid matrixes of different charges

AUTHOR(S): Li, J.-r.; Du, Y.-k.; Boullanger, P.; Jiang, L.

CORPORATE SOURCE: Institute of Photographic Chemistry, Molecular Science

Center, Laboratory of Colloid and Interface, Academia Sinica, Beijing, Peop. Rep. China

SOURCE: Thin Solid Films (1999), 352(1,2), 213-217

CODEN: THSFAP; ISSN: 0040-6090

PUBLISHER: Elsevier Science S.A.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The influence of lipid matrixes with different charges on the protein folding behavior has been investigated by using the Langmuir-Blodgett

(LB) technique. To understand the conformation change under different forces, glucose oxidase (GOD) from *Aspergillus Niger* was used as a protein model. Eight glycolipids (1,2-o-dialkyl-3-o-.beta.-d-glycosylglycerols and alkyl 2-amino-2-deoxy-.beta.-d-glucopyranoside) were used as the matrixes for this investigation. It was obsd. that the GOD can penetrate into neutral glycolipid monolayer and change its conformation in favor of the .alpha.-helix formation. Moreover, GOD strongly adsorbed to the pos. charged glycolipid monolayer and change its conformation in favor of the .beta.-sheet formation. Enzymic activity measurements showed that the more the .alpha.-helix conformation content is in the GOD, the higher activity the GOD will be. This fact suggested a new way to mediate the conformation of protein in organized mol. assemblies, and provided a new thinking for the prepn. of biomimetic film and biosensor.

CC 6-3 (General Biochemistry)

Section cross-reference(s): 7

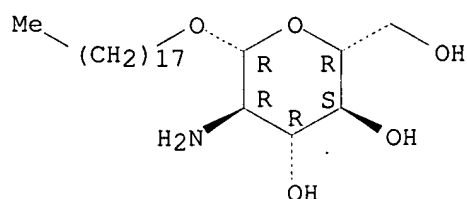
IT 81281-23-4 86363-39-5 86363-40-8 133128-66-2 159302-84-8
159302-85-9 159405-31-9

RL: BUU (Biological use, unclassified); PRP (Properties); BIOL
(Biological study); USES (Uses)

(folding and enzymic activity of glucose oxidase in glycolipid matrixes

of different charges)
 IT 159405-31-9
 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL
 (Biological
 study); USES (Uses)
 (folding and enzymic activity of glucose oxidase in glycolipid
 matrixes
 of different charges)
 RN .159405-31-9 HCAPLUS
 CN .beta.-D-Glucopyranoside, octadecyl 2-amino-2-deoxy- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.



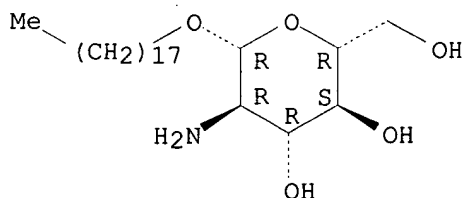
REFERENCE COUNT: 18
 REFERENCE(S): (2) Adler, A; Methods in Enzymology 1973, V27, P675
 HCAPLUS
 (6) Cheesman, D; Adv Protein Chem 1954, V9, P439
 HCAPLUS
 (7) Du, Y; Coll Surf B: Biointerfaces 1996, V7, P129
 HCAPLUS
 (9) Fenderson, B; BioEssays 1990, V12, P173 HCAPLUS
 (10) Hakomori, S; Annu Rev Biochem 1981, V50, P733
 HCAPLUS
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1998:192924 HCAPLUS
 DOCUMENT NUMBER: 128:305665
 TITLE: Spectroscopic study of mixed Langmuir-Blodgett films
 of alkyl glycoside with positive charge and glucose
 oxidase
 AUTHOR(S): Du, Yukou; Tang, Ji'an; Jiang, Long; Boullanger, Paul
 CORPORATE SOURCE: Institute of Photographic Chemistry, Chinese Academy
 of Sciences, Beijing, 100101, Peop. Rep. China
 SOURCE: Ganguang Kexue Yu Guang Huaxue (1998), 16(1), 32-37
 CODEN: GKKHE9; ISSN: 1000-3231
 PUBLISHER: Kexue Chubanshe
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 AB Octadecyl-2-amino-2-deoxy-.beta.-D-glucopyranoside (C18) was synthesized.
 The interaction between C18 and glucose oxidase was studied by recording
 isotherms of monolayers. Mixed C18/glucose oxidase on Langmuir-Blodgett
 (LB) films was investigated by spectroscopy methods. From the results of
 CD spectrum, glucose oxidase immobilized in C18 films partly changed
 their

secondary structure. Low temp. fluorescence studied showed that part of
 the glucose oxidase mols. in the LB film maintained its native structure,

and part became partly denatured.
 CC 7-7 (Enzymes)
 IT **159405-31-9**
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (glucose oxidase interaction with; spectroscopic study of mixed
 Langmuir-Blodgett films of alkyl glycoside with pos. charge and
 glucose
 oxidase)
 IT **159405-31-9**
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (glucose oxidase interaction with; spectroscopic study of mixed
 Langmuir-Blodgett films of alkyl glycoside with pos. charge and
 glucose
 oxidase)
 RN 159405-31-9 HCAPLUS
 CN .beta.-D-Glucopyranoside, octadecyl 2-amino-2-deoxy- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry.

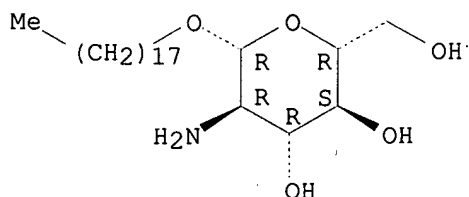


L13 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1995:977401 HCAPLUS
 DOCUMENT NUMBER: 124:176728
 TITLE: Synthesis and surface-active properties of some alkyl
 2-amino-2-deoxy-.beta.-D-glucopyranosides
 AUTHOR(S): Boullanger, Paul; Chevalier, Yves; Croizier,
 Marie-Rose; Lafont, Dominique; Sancho,
 Marie-Rose
 CORPORATE SOURCE: Lab. Chimie Org., Univ. Lyon 1, Villeurbanne,
 F-69622,
 Fr.
 SOURCE: Carbohydr. Res. (1995), 278(1), 91-101
 CODEN: CRBRAT; ISSN: 0008-6215
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Several alkyl 2-acetamido-2-deoxy-.beta.-D-glucopyranosides were
 synthesized using either the oxazoline or the N-allyloxycarbonyl
 procedure. The latter procedure gave better yields with fatty alcs. and
 cholesterol. The derivs. thus prepd. were partly or fully deprotected
 and
 their surface-active properties assessed.
 CC 33-7 (Carbohydrates)
 Section cross-reference(s): 32, 46
 IT 72205-17-5P 147025-06-7P 147126-58-7P 152914-68-6P 152914-69-7P
 159302-81-5P 159302-82-6P 159302-85-9P **159405-31-9P**

Owens 09/149,721

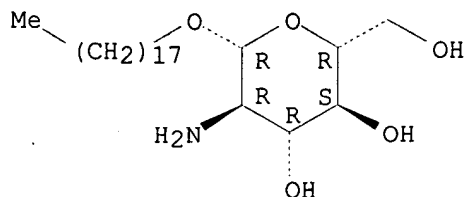
173725-28-5P 173725-29-6P 173934-01-5P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and surface-active properties of alkyl
aminodeoxyglucopyranosides)
IT **159405-31-9P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and surface-active properties of alkyl
aminodeoxyglucopyranosides)
RN 159405-31-9 HCAPLUS
CN .beta.-D-Glucopyranoside, octadecyl 2-amino-2-deoxy- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.



L13 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1994:712595 HCAPLUS
DOCUMENT NUMBER: 121:312595
TITLE: Mesomorphic amino sugars
AUTHOR(S): Stangier, P.; Vill, V.; Rohde, S.; Jeschke, U.;
Thiem, J.
CORPORATE SOURCE: Dep. Chem., Univ. Alberta, Edmonton, AB, Can.
SOURCE: Liq. Cryst. (1994), 17(4), 589-95
CODEN: LICRE6; ISSN: 0267-8292
DOCUMENT TYPE: Journal
LANGUAGE: English
AB New liq. cryst. compds. were prepd. from glucosamine and
6-amino-6-deoxyhexopyranose. The monoalkylated carbohydrates show
smectic phases. The influence of the amino group on the clearing temps. is
minor. The salts of the cyclic amines can form smectic or discotic mesophases.
The clearing points are lower than those obsd. for acyclic amines.
CC 75-11 (Crystallography and Liquid Crystals)
Section cross-reference(s): 33
IT 159302-74-6P 159302-75-7P 159302-82-6P 159302-86-0P 159302-88-2P
159302-89-3P 159302-90-6P 159302-91-7P 159302-92-8P
159405-31-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and transition temps. of)
IT **159405-31-9P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and transition temps. of)
RN 159405-31-9 HCAPLUS
CN .beta.-D-Glucopyranoside, octadecyl 2-amino-2-deoxy- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.



L13 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1991:415307 HCAPLUS

DOCUMENT NUMBER: 115:15307

TITLE: Skin-lightening cosmetics containing glucosamines

INVENTOR(S): Mishima, Yutaka; Okajima, Takehiko; Hori, Toshiro;
Nishimoto, Katsuya; Oyama, Yasuaki

PATENT ASSIGNEE(S): Taiyo Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02273608	A2	19901108	JP 1989-96859	19890417

OTHER SOURCE(S): MARPAT 115:15307

AB Skin-lightening cosmetics contain .gtoreq.1 glucosamines I (R1-5 = H, C<30

acyl, alkyl, alkenyl, alkynyl, aryl; .gtoreq.1 of R1-5 = alkyl, alkenyl, alkynyl, aryl) and/or their salts as active ingredients. The cosmetics are safe and prevent skin darkening caused by the sun light. A lotion comprised poly(oxyethylene) (20) monooleate 1.0, EtOH 3.0, polyethylene glycol-600 5.0, citric acid 0.03, Na citrate 0.2, 1-O-ethyltetraacetylglucosamine 0.1, methylparaben 0.1, fragrances, and H2O to

100 wt. parts.

IC ICM A61K007-00

CC 62-4 (Essential Oils and Cosmetics)

IT 134120-77-7 134227-31-9 **134227-32-0** 134227-33-1

134227-34-2 134275-62-0 134309-19-6

RL: BIOL (Biological study)

(skin-lightening cosmetics contg.)

IT **134227-32-0**

RL: BIOL (Biological study)

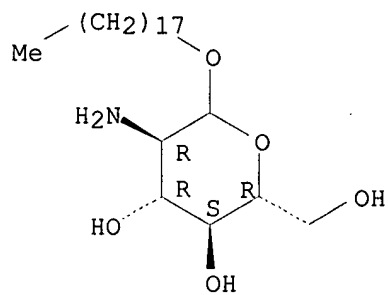
(skin-lightening cosmetics contg.)

RN 134227-32-0 HCAPLUS

CN D-Glucopyranoside, octadecyl 2-amino-2-deoxy-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Owens 09/149,721



● HCl